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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,705	09/09/2003	Robert Lombardi	0263421-0042	2309

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EXCHANGE PLACE  
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BOSTON, MA 02109

EXAMINER

BRINSON, PATRICK F

ART UNIT PAPER NUMBER

3754

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

8N

<b>Office Action Summary</b>	<b>Application No.</b> 10/658,705	<b>Applicant(s)</b> LOMBARI ET AL.	
	<b>Examiner</b> Patrick F. Brinson	<b>Art Unit</b> 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 December 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10, 12-14 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-14 and 16-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10, 12-14, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 3,063,470 to **Forester**.

The patent to **Forster** discloses a pressure assembly having a passage fitting (16) providing fluidic communication between an interior and an exterior of the pressure assembly and a water chamber, including a tube (7, 10) having first and second ends, with a plurality of apertures or slots (8). A cylindrical diaphragm (13) disposed about the tube, wherein the apertures (8) provide fluidic communication between an interior of the tube and the interior of the diaphragm. Collar (11) provides fluidic communication between the passage fitting and the interior of the tube, wherein a first end of the diaphragm is sealingly fitted to a portion of the collar, as recited in claim 1. A valve (5) provides controllable fluidic communication between an exterior of the tank and a space (18) between the pressure assembly and the diaphragm, as recited in claim 2. A portion of the collar has an outer diameter

that is approximately equal to the inner diameter of the diaphragm, as recited in claim 4. The opposite end of the diaphragm is sealingly engaged to cap (11), as recited in claim 6, and the cap is sealingly engaged to the second end of the tube portion (10), as recited in claim 7. Fig. 3 discloses the middle portion of the diaphragm contacting the tube during normal operating pressures, as recited in claims 8 and 13. **Forester** does not disclose the apertures or slots being open to the end of the tube. At the time the invention was made, it would have been an obvious design choice to a person of ordinary skill in the art to form the slots to open to the end of the tube of **Forester** because Applicant has not disclosed that having the notches at the end or opened to the end of the tube provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the slots near the end as suggested by **Forester** because the slots near the end function equally to allow fluidic connection between the tube and the interior of the diaphragm. Therefore, it would have been an obvious matter of design choice to modify **Forester** to obtain the invention as specified in claims 1, 9 and 14. At the time the invention was made, it would have been an obvious design choice to a person of ordinary skill in the art to form the ends as two domes welded to one another because Applicant has not disclosed that these features provide an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have

expected Applicant's invention to perform equally well with the shell (15) welded to ring piece (14) and an H-shaped end screwed into the ring piece as suggested by **Forester**. Therefore, it would have been an obvious matter of design choice to modify **Forester** to obtain the invention as specified in claims 3 and 9.

2. Claims 14 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by US 3,744,527 to **Mercier**.

The **Mercier** reference discloses a water chamber for an expansion tank comprising a tube (50) having first and second ends, a collar (37b) disposed at one end of the tube a cap (37a) at the second end and a resilient diaphragm (30) having first and second ends wherein the first end of the diaphragm is sealingly fitted about the collar and the second end of the diaphragm is sealingly fitted about the cap, as recited in claim 14. The tube has a plurality of notches or apertures (53) providing fluidic communication between the interior of the tube and the interior of the diaphragm, as recited in claim 16. The collar (37b) has two portions having different exterior diameters, with the exterior of one of the portions being the same as the exterior diameter of the cap (37a), as recited in claim 17, with the cap (37a) is sealingly attached to the second end of the tube, as recited in claim 18. **Mercier** does not disclose the apertures or slots being open to the end of the tube. At the time the invention was made, it would have been an obvious design choice to a person of

ordinary skill in the art to form the slots to open to the end of the tube of **Mercier** because Applicant has not disclosed that having the notches at the end or opened to the end of the tube provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the slots near the end as suggested by **Mercier** because the slots near the end function equally to allow fluidic connection between the tube and the interior of the diaphragm. Therefore, it would have been an obvious matter of design choice to modify **Mercier** to obtain the invention as specified in claims 14.

### *Response to Amendment*

3. Applicant argues that the amended claims are not patentable over **Forster** and **Mercier** because they now include the limitation that the slots are opened to the end of the tube. It is the examiner's position that this feature is not a patentable one, wherein the function of the holes of **Forster** and **Mercier** are the same as the slots of the present invention, which is to allow fluid communication between the exterior of the tube and the interior of the diaphragm. There is nothing in the specification that supports an advantage of a slotted end of the tube over a hole near the end of the tube. Providing the tube with a slot is a mere design variation over the prior art in communicating fluid from the exterior of the tube with the interior of the diaphragm.

***Conclusion***

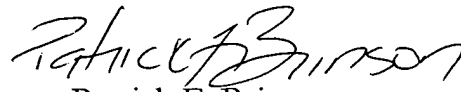
4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Patrick F. Brinson** whose telephone number is (571) 272-4897. The examiner can normally be reached on M-F 7:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Michael Y. Mar** can be reached on (571) 272-4906. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patrick F. Brinson  
Primary Examiner  
Art Unit 3754

P. F. Brinson  
March 4, 2005